



PCs to the core

Apple's switch to Intel chips may have surprised many in the IT world, but Paul Nesbitt can think of several advantages for the PC market, for developers and, above all, for consumers

Apple's entrance into the x86 PC market next year could mean some exciting developments for PC buyers. A new player could be the catalyst needed to shake up an industry that has fallen into a homogenous state.

Compared with the ferocious pace of innovation in the games console market, where Microsoft, Sony and Nintendo are preparing to fight to the death with three competing standards, the PC market is static. The mobile phone and music player industries are expanding into new markets, adding features and driving new ideas, such as podcasting. Conversely, the PC market is based on a single standard and has suffered from an unrelenting price war, led by Dell. This company focuses on squeezing costs rather than pushing innovation.

Two companies spared Dell's relentless economics are Microsoft and Intel, which are responsible for defining the PC. Sadly, both companies have lost their way, either through ineptitude or financial design. Microsoft hasn't delivered a new version of Windows since launching Windows XP in 2001. Since then, the company has been locked in a security arms race with virus writers, only occasionally launching tepid initiatives on the side, such as the Media Center PC standard.

Intel's push for a post-x86 processor architecture, Itanium, has failed and the company now finds itself following AMD's lead into 64-bit processing. On the design side, Intel regularly shows off clunky concept PCs at trade shows, which then fade into obscurity as PC vendors ignore them.

When Acer subsidiary AOpen decided to make a splash with a compact PC design this year, it was Apple's Mac mini that the company mimicked. Significantly, AOpen's website advertises the fact that the PC was developed with help from Intel.

So, although Apple may account for only two per cent of all PCs sold worldwide, its impact is more significant than its sales volume suggests. In recent years the company has driven the adoption of such new technologies as FireWire, WiFi, built-in DVD burners and Intel's USB. Dell has merely followed.

DESIGN FOR LIFE

If nothing else, Apple's move to Intel will liven things up for consumers and PC sellers. Apple may have been forced into this move by a disappointing supply of PowerPC processors, but if it can negotiate the transition to x86 successfully, it could give Dell, HP and Microsoft something to think about. At the very least, the competition will benefit consumers.

Apple has all but left the hardware technology business. Today FireWire is its only current homegrown technology, so the marriage with Intel,



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which increasingly sells complete hardware platforms to OEMs, could obviate Apple's need to design its own motherboards, enabling the company to focus on what it does best: writing software and creating eye-catching cases. Many analysts believe that Intel is eager to tap into Apple's design savvy to co-fund interesting new miniaturised PCs and laptops. HP has not been much of an asset to Intel in this department.

The main loser in the Intel-Apple accord is Microsoft. PC OEMs already offer machines with Linux installed, as disaffection for Windows grows, but for the mass market, especially the consumer sector, Mac OS X is streets ahead. With Apple no longer hindered by underpowered PowerPC processors, its superbly designed laptops could start selling in massive numbers, especially as they should also be able to run Windows natively.

Apple has already secured the support of its major software developers, including Microsoft's Mac division, so there should be a reasonable volume of Mac software available when the first MacTels appear. The company's own large portfolio of applications has been designed to run on x86 for the past five years as part of Apple's back-up plan should something go wrong with the PowerPC.

RESEARCH AND DEVELOPMENT

The move to x86 will also make it easier for Windows and Linux developers to produce Mac versions of applications and games. For example, CodeWeavers, a developer specialising in tools to port Windows applications to Linux, has announced

that it is offering the same technology (called CrossOver) to port Windows programs to Intel Macs.

"Despite the fact that both CrossOver and the Mac operating system are built atop UNIX, CrossOver was restricted to Windows-to-Linux application porting because the tool requires Intel CPUs for optimal operation," said CodeWeavers CEO Jeremy White.

"Apple's decision to shift to Intel chips is good news for many Windows developers who, for reasons of time and expense, have never created Mac versions of their key applications. CodeWeavers can give these developers a low-cost and near-instant path to market," he said. He even promised that Intel Macs would be able to run unconverted Windows applications using another of his products. "By installing CrossOver Office on Intel-based Macs, many Windows-only applications, including Windows-based games, utilities and business applications, will operate seamlessly and reliably," he said.

While Mac OS X 10.4 has been widely lauded in the PC and financial press as superior to Windows, Apple still faces the same obstacle it faced before its move to x86. If you want to run Mac OS X you have to buy a Mac. Apple is determined that its OS will run only on Apple hardware, even though there is no technical reason why the x86 version of Mac OS X could not run on a PC.

For Apple the decision is primarily financial. The bulk of its revenues, even after the success of iPod, still comes from Mac hardware. Until Apple believes it can make at least as much money by licensing Mac OS X to PC OEMs as it can from the margins on its hardware, it won't sanction a Mac clone market.

BRAND LOYALTY

Some analysts have cited the HP iPod as a sign that Apple is taking a more open-minded approach, but there is no sign that it intends to follow suit with the Mac. This is cultural, too.

Apple boss Steve Jobs believes that it is not just Mac OS X and system design that differentiate Apple from the pack and save it from becoming another loss-making PC hardware vendor. It is the superior user experience that comes from buying the same hardware and software from a single vendor. The result is greater reliability for the customer and lower support costs for Apple. And if there were any remaining doubt that the company intends to keep up its hardware business rather than licensing Mac OS X to companies such as Dell, remember that it has just spent hundreds of millions of dollars creating its own chain of high-end retail stores. **CS**